

#### **Product Description**

**Product Number: 4205.01.15** 

# **WAREHOUSE MANAGEMENT SYSTEM**

(GERS / ESCALATE RETAIL / SYMPHONY TELECA)

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Version: 1.0.0 Product Owner: Sal Petilos

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The Warehouse Management System (WMS) is a hardware and software solution providing the foundation for the Procurement, Warehousing and Distribution functions of the Department of Alcoholic Beverage Control. It is comprised of the following components:

**Hardware:** A quad-core "enterprise" server with a mirrored storage array for on-site redundancy, and a duplicate server/mirrored storage array in Richfield which runs in standby mode and updates at least every 20 minutes. The "enterprise" server hosts a single instance of Oracle within which 3 copies of the WMS database (Production, Vendor Test, and DABC Developer Test), the Compliance database, and the Samples database reside.

**Software:** The WMS itself is an Oracle Forms & PowerBuilder client application which manages the alcoholic beverage inventories within the AS/RS "Overstock" location, the "Home" and "Staging" Warehouse locations, and the agency's Club and Retail Stores throughout the State. This system is enhanced by a large number of custom applications and reports which provide specific functionality to the stores, warehouse, and corporate functions. These applications & reports are developed in-house in Delphi, and .Net/C#.

**Connectivity:** Critical to the success of this system is its 7x24 hour connection to other key components including the Warehouse, Voxware Pick-To-Voice System, AS/RS, Stores, EFT processor, FiNet, Back-up server, Web Services, Licensees, the Department of Public Safety (Alcohol Enforcement Div), the National Alcoholic Beverage Control Association (NABCA), and the 3 Taxing Authorities involved in license renewals.

The hours of support required for the WMS System are listed below.



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Application	Support Hours	Days of Week
WMS	24X7 with one hour down time from Midnight to 1 am	Monday - Sunday

# **Product Features and Descriptions**

Feature	Description
Purchasing	Tracks and manages vendors and products making up the central item master table, and allows for the purchasing of product and the maintenance of prices at both cost and retail levels.
Receiving	Confirms receipt of product shipped into the warehouse or drop-shipped to the stores (either Vendor Owned Inventory (Bailment) or product received from purchase orders) and allows adjustments as appropriate. Also interfaces with the AS/RS automated warehouse system when received product needs to be placed into the "Overstock" locations.
Warehousing	Tracks product inventories within the warehouse "Home", "Overstock," and "Pick" locations, responding to restock needs on a min/max basis. Inventories are also tracked with regard to bailment or owned status. All warehouse operations are conducted using wireless RF guns.
Store Ordering	Store Orders are captured via the wide area network, and over the web, fax or telephone for package agencies. These orders are then pushed to the Voxware Pick-to-Voice system allowing orders to be "picked" by warehouse employees. Min/Max inventories in the "Home" locations are monitored during picking to facilitate real-time home location replenishment. Picked products are moved to the "Staging" locations for shipment.
Shipping	Tracks the movement of product from the "Staging" areas of the warehouse into the individual store locations, and initiates the invoicing to the agency for bailment items.
Inventory Control	Tracks inventory movements due to daily upload of Sales information from all DABC wholesale and retail locations. Also supports periodic inventory counts and reconciliations at all DABC locations.
Reporting	Reporting, for the most part, is done using custom developed add-on programs to meet the unique, specific, and changing requirements of the DABC.
Program Interfaces	The application interfaces with the Warehouse, AS/RS, Stores, EFT processor, FiNet, Back-up server, Web Services, Licensees, the Department of Public Safety (Alcohol Enforcement Div), the National Alcoholic Beverage Control Association (NABCA), and the 3 Taxing Authorities involved in license renewals.
Custom Coded Functions	To adapt this commercial Merchandising/Warehousing system to the precise needs of DABC, the agency has a large number of custom programs. These were either written in-house or by consultants and are being steadily migrated from Delphi to .Net/C#.



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Data Extracts	Periodic transaction logs are created approximately every 20 minutes and transmitted to Richfield where they are applied to the backup & Disaster Recovery fail-over server. Additional data extracts are performed for the National Alcohol Beverage Control Association (NABCA) and for State FiNet.
Web Sites and Web Services	Maintenance of the DABC and Parents Empowered Web Sites with regard to design, creation, hosting, and maintenance. Support the agency in effective content management to maintain the currency and utility of the sites.  Maintenance of online service offerings including Price Calculator, Licensee & Package Agency Orders, Real Time Price List, Special Orders.
Program modifications	Program bug fixes and/or system enhancements are deployed on schedule as prioritized and agreed upon by the DABC executive management and the I.T. Action Committee (ITAC) members.
System Response Time	The on-site server location provides instantaneous response to user requests and other system interfaces including daily ordering & procurement functions, warehouse receiving and pick operations, and automated replenishment triggers.

# **Features Not Included**

Feature	Explanation
User Training	DTS Does not support user training.
User Manuals	The creation and maintenance of user manuals is performed by DABC personnel.

# Rates and Billing

Feature	Description	Base Rate
Application DBA	Maintenance of all instances of the Production Database including load balancing, Richfield synchronization, backup/restore operations etc., and liaison with the COTS vendor.	See DTS Approved Rate 1 DBA
Custom Code bug fixes and enhancements	Programming, unit and beta testing of custom developed applications to fix reported bugs, research and fix discrepancies between the various package databases, program enhancements to existing applications as well as develop new application functionality as requested.	See DTS Approved Rate 3 Programmer/Analysts



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Hardware Support	System Hardware installation, environment, LAN/WAN connectivity, etc.	Support within established rates for DTS enterprise hosting, networking, & security staff as appropriate.
Contract Administration	DTS provides the operation, maintenance, and timely renewal for DABC Contract # 016577. This includes appropriate amendments, and maintenance of adequate contract spend ceiling.	1 IT Manager + DTS Contracts Staff
	DTS also maintains Oracle licensing for the enterprise servers, the cost of which is charged to the DABC.	

# Ordering and Provisioning

WMS users and/or DTS support personnel report application bugs, whether in the core package or custom programs, to the development staff using the Development Help Desk process currently in place. Core package bugs are reported to the software vendor using their on-line support system. Custom program bugs are prioritized and resolved by the development group and reported to the agency's Information Technology Advisory Council (ITAC) on a regular basis.

Enhancement requests for program improvements or new functionality are made in writing to the Systems Development Supervisor, who logs them into the ITAC project tracking system. These requests are then discussed and prioritized in a formal bi-monthly ITAC review meeting.

# **DTS Responsibilities**

- 1. Manage the DTS personnel resources to ensure efficient and effective support of the programs, servers, network, databases, hardware, and associated contracts.
- 2. Participate with the ITAC in identifying and prioritizing program fixes and enhancements to the custom developed applications.
- 3. Program, test and deploy modifications to the custom applications to fix reported bugs and implement enhancements to accommodate changes in business practices and/or user requests.
- 4. Interact with Escalate Retail (GERS) to log and monitor progress of program fixes reported to them using their online support center.
- 5. Install new releases of the core package software delivered by Escalate Retail (GERS).
- 6. Coordinate testing of all applications that interface with the Escalate Retail (GERS) package whenever new releases or changes are installed.
- 7. Maintain Oracle licensing and ensure the various databases that interact with the Escalate Retail (GERS) product are kept in sync on a day-to-day basis.
- 8. Assist the agency in defining requirements for enhancements to the custom programs or requests for new functionality. Raise issues to the DABC leadership when decisions need to be made related to how a change should be implemented from a business perspective.



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- 9. Define technical requirements for enhancement requests and legislative mandates.
- 10. Provide network, server, and database support as necessary to ensure system availability during all hours of operation, including On-call time for DABC business hours outside of normal DTS working hours, including weekends and holidays.
- 11. Monitor database performance regularly and provide tuning when required.
- 12. Ensure that the nightly sales and inventory roll-up processes from the stores are successfully completed.
- 13. Perform backups, to Richfield, as per the customer request to ensure that recovery capabilities are maintained and that fail-over to and recovery from the Richfield data center can be performed in accordance with the DABC Disaster Recovery Plan. Perform DR exercises as necessary to keep the agency Disaster Recovery Plan up to date.
- 14. Provide desktop support to fix problems with equipment used to run the WMS core package and the attendant custom applications.
- 15. Maintain the ITAC Project Tracking program to ensure that user requests are visible, prioritized, developed and delivered as expected by agency managers.
- 16. Maintain other systems required to support the WMS core application, including Point of Sale, Carillon Financials Accounts Payable package, AS/RS automated warehouse, Licensing and Compliance System, Web Services and FiNet.
- 17. Support all DABC divisions in the effective management of website content and web services.
- 18. Risk Assessments recently completed at DABC identified existing mitigation controls that are in effect at this time. DTS will verify and test all existing mitigation controls that are associated with DTS responsibilities.

## **Agency Responsibilities**

- 1. Participate in defining business requirements for changes requested through the ITAC process.
- 2. Report bugs discovered in the core product or any attendant applications using the System Development Help Desk procedures. Identify what the user was doing when the bug occurred, any error messages encountered and steps to reproduce the problem.
- 3. Perform acceptance testing of each new release of the core product and custom applications and report any problems to the Systems Development unit.
- 4. Write and maintain operation manuals explaining the processes required to use the applications. Provide user training as required.
- 5. Provide the financing necessary for the approved DTS rates which cover the daily server administration and the scheduled replacement of the primary and backup enterprise servers, associated hardware, and system migration services. Also provide financing for WMS software maintenance which is a line item in the DABC IT budget.
- 6. Provide financing for major website enhancements, upgrades, and new/redesigned web services.



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7. Risk Assessments recently completed at DABC identified existing mitigation controls that are in effect at this time. DABC will verify and test all existing mitigation controls that are associated with DTS responsibilities.

**DTS Service Levels and Metrics** 



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In an effort to improve service to our customer agencies, DTS will measure and report on the following enterprise metric goals:

- Application Availability
- Resolution Time
- Initial Response
- First Contact Resolution
- Customer Satisfaction Surveys

#### **Application Availability:**

Application availability measures DTS' efforts to ensure agency key business applications meet the percent of availability goals identified in the agency Service Level Agreements (SLA). DTS will determine application availability based upon the collective measurement of the configuration items (both hardware and software) which are determinant to supporting the agency business services applications. These metrics will be reported each month by agency with a cumulative report showing DTS' efforts over several months and posted to the DTS Metrics web page at <a href="http://dts.utah.gov/metrics/index.php">http://dts.utah.gov/metrics/index.php</a>.

<b>Metric Description</b>	Target
Availability during production hours based on	99% Availability
23 Hrs/Day, 6.5 Days/Week (38,870 min/mo).	

#### **Resolution Time:**

Resolution time measure DTS' efforts to resolve customer incidents within the time lines set below based upon urgent, high, medium and low priorities. These metrics will be reported each month, by agency, with a cumulative report showing DTS' efforts over several months. These reports will then be posted on the DTS Metrics web page at: <a href="http://dts.utah.gov/metrics/index.php">http://dts.utah.gov/metrics/index.php</a>.

<b>Total Time to Resolution</b>	Target:
	Percent of Tickets Meeting Priority Timelines
Low priority - 6 Business hours	90%
Medium priority - 4 Business hours	90%
High priority – 3 Clock hours	90%
Critical priority - 3 Clock hours	95%

#### **Initial Response:**

Initial response measure DTS' efforts to respond to customer incidents within the timelines set below based upon urgent, high, medium and low priorities. These metrics will be reported each month by agency with a cumulative report showing DTS' efforts over several months. These reports will then be posted on the DTS Metrics web page at: <a href="http://dts.utah.gov/metrics/index.php">http://dts.utah.gov/metrics/index.php</a>.

Time to Initial Response	Target: Percent of Tickets Meeting Priority Timelines
Low priority – 1 Business hour	85%



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Medium priority – 1 Business hour	85%
High priority – 1 Clock hour	90%
Critical priority – 30 Clock minutes	95%

#### **First Contact Resolution:**

First contact resolution measures DTS' efforts to resolve customer incidents on initial contact with either our help desk or a technical specialist. These metrics will be reported each month, by agency, with a cumulative report showing DTS' efforts over several months. These reports will then be posted on the DTS Metrics web page at <a href="http://dts.utah.gov/metrics/index.php">http://dts.utah.gov/metrics/index.php</a>.

<b>Metric Description</b>	Target
First Contact Resolution	95% of all incidents reported resolved on initial contact

#### **Customer Satisfaction Surveys and Reporting:**

All users/customers whose technical incidents are resolved by DTS staff will be given the opportunity to respond to an on-line survey regarding their level of satisfaction with the support received from DTS. Responding to the survey is voluntary.

The chart below identifies DTS enterprise goals for customer satisfaction. Cumulative monthly reports will be created displaying the customer's level of satisfaction with DTS support. These reports will then be posted on the DTS Metrics web page at <a href="http://dts.utah.gov/metrics/index.php">http://dts.utah.gov/metrics/index.php</a>.

#### Customer Satisfaction Target

Metric Description	Target
Average level of satisfaction with resolution efforts	$\geq$ 4.5 on a scale of 0 - 5
Percentage of respondents expressing satisfaction (vs. dissatisfaction)	95% of respondents satisfied